



Figure 29. Map of Moscow Province (1774)

names would not be obscene.”³⁴ Aside from the Soviet period, which is not covered in this chapter and famous for drastic changes of place names, the other major wave in Russian history to change place names was caused by the Imperial government decree

in 1815, when Russia celebrated its victory over Napoleon. Thus, Alexander I ordered changes of the names of many Ural villages to those of West European cities (especially French ones). As a result, now we have in the Ural mountains places such as Paris, Brussels, Bouillon, and Marseilles, but it is impossible to find these names on small-scale maps because all of them have become derelict, little, miserable villages lost in the Russian wilderness.

Gradually, and especially after the General Survey had been completed, the survey department began to be involved in detailed cartography of natural resources. In the nineteenth century this tendency developed in the Ministry of State Properties, which organized surveys aimed at amelioration of soil, forest management, and other economic improvements.³⁵

The Ministry of State Properties undertook intensive studies for the General Survey of Siberia conducted in the 1850s. Because of the specific conditions of mostly unexplored Siberia, as well as the need to investigate its natural resources and possibilities for settling state-owned serfs and exiled criminals there, special manuals on land surveying were required in addition to general survey instructions. To draft these manuals, various scientists (geographers, ethnographers, statisticians, and geodesists) were invited by the ministry. Remarkably, the first version of the manual was sent to Siberia to be “tested by life,” and it was only after the document was verified and revised in the field during

34 Cited by Postnikov, *Razvitie krupnomasshtabnoi...*, p. 60.

35 The results of studies by civilian topographers in forest cartography survived as a manuscript: “Map of Forests and the Timber Industry in Russia,” which was discovered by M.A. Tsvetkov in 1949. Recently I found, in the Russian State Historical Archives (St. Petersburg), a file of the Ministry of State Properties which demonstrates that it took two years to complete this map and other similar maps since the ministry tried to compare the existing elements of forest map making, such as scales and legends.

the following two years that the document was finally reviewed by the scientists and approved by the Ministry of State Properties. Undoubtedly, this instruction for surveying Siberia was the most detailed, scientifically sound guidance prepared in nineteenth century Russia to survey lesser known territories.³⁶

In 1845, the Russian Imperial Geographic Society was organized, and one of its first major projects was aimed at uniting the efforts of land surveyors and military topographers. The main idea behind this was to “reinforce” land survey documents drawn up from the end of the eighteenth to the beginning of the nineteenth centuries with mathematical, astronomic, and geodetic elaboration. The surveys that had been made since 1846 under the general leadership of Lieutenant-General Aleksandr Ivanovich Mende (who had been a graduate of the aforementioned Gappaniemy Cadet School in Finland) laid the foundation for a general approach to topographic map-making satisfying broad circles of consumers. Surveying and mapping instructions were drafted by a special commission representing various agencies, and were approved by the Russian Geographic Society. Mende intended to make topographic survey atlases for all the guberniyas of European Russia, but the program was interrupted in the 1860s for financial reasons. Although topographical atlases for Tver, Ryazan, Tambov, Vladimir, Yroslavl, Simbirsk, Nizhnii Novgorod, and Penza Guberniyas had been compiled, only those of Tver, Ryazan, and Tambov Guberniyas and a few maps based on Mende’s surveys were published. All other maps and geographic descriptions produced by this program survived only in manuscript form and are stored in the Russian State Archives of Ancient Documents in Moscow.

The Russian Geographic Society continued to make efforts to create a united topographic and geodetic service in Russia through the late nineteenth and early twentieth centuries. As a first step in this direction, A.A. Tillo, K.N. Pos’et, and V.I. Vernadskii suggested that a coordinating-consulting Geodetic Council be organized. Although this proposal failed to be realized in pre-revolutionary Russia, the basic formulas for the 1919 decree to organize the Supreme Geodetic Department (the present Central Geodetic and Cartographic Administration of the Ministry of Natural Resources and Protection of Environment of the Russian Federation) were thus prepared.

5. RUSSIA’S EXPANSION AND “FRONTIER CARTOGRAPHY”

The Baltic and Caspian Seas

One of Peter I’s main aims was to secure control over outlets to the sea in the north-west, south, and east. Naturally he focused most on the Baltic Sea, where he built his new capital, St. Petersburg. It is sufficient to say that twenty-one of the twenty-nine navigational atlases published in eighteenth century Russia were devoted to the Baltic. Another academic achievement of Peter I’s reign was the precise charting of the Caspian Sea, which, until then, had been

³⁶ Postnikov, *Razvitie krupnomasshtabnoi...*, pp. 192-199.

depicted incorrectly on most maps.³⁷ Peter I, in February 1721, sent a new Russian chart of the Caspian Sea to Paris to express his gratitude for being elected a member of the French Academy of Sciences (on December 22, 1717). It caused a sensation among the men of letters in France. Panegyricizing on Peter I, B. Fontenelle, secretary of the French Academy, exclaimed that “we are very grateful to You, Great Academic Victor. We at last know the true shape of this sea which bears no resemblance to the former and more common one.”³⁸

Via Eastern Siberia to Kamchatka and Alaska

The Russian hydrographic and cartographic works on the Caspian and Baltic Seas were entirely based on new, West European principles, and it is virtually impossible to identify in them any link with earlier Russian cartographic traditions. The situation was quite different, however, with regard to the cartography relating to the waterways of the Northern and Eastern boundaries of the Russian Empire - another area in which Russian hydrographers and geographers achieved international fame in the eighteenth century.

As stated previously, during the long push eastwards, Russian explorers relied upon local information accumulated over the centuries by Siberian peoples. Such information is reflected, for example, in maps by S.U. Remezov. The inhabitants of Chukotka spoke of a “Great Land” lying across the ocean, and this provided an important argument in favor of organizing a scientific expedition to find this land, which educated circles in Petrine Russia assumed to be America. This assumption was proved to be correct as a result of the First (1728) and Second (1741-42) Kamchatka Expeditions led by Vitus Bering and Aleksei Il’ich Chirikov, and also of the voyages made by M.S. Gvozdev and I. Fedorov to the islands in the Bering Straits and to the shores of North Alaska (1732).³⁹

The initial stage of the First Kamchatka Expedition is well illustrated by the manuscript *Map of Eastern Siberia from the Lena to Kamchatka Inclusive* stored in the Russian State Military History Archives (Figure 30).⁴⁰ Aleksei V. Yefimov

37 Only a few medieval maps gave a relatively accurate picture of the Caspian Sea. One of these was the round map of the world compiled by a Venetian monk, Fra Mauro, with the help of Andrea Bianco, a well-known engraver, for the King of Portugal in 1459. The map had used sources lost to the later cartographers who outlined the sea incorrectly right up to the Russian surveys in the early eighteenth century. For more on this mysterious map see: Postnikov, *Razvoitie kartografii...*, pp. 93-94.

38 I.I. Golikov, *Trudy Petra Pervogo*, Chast’ 8 (Moscow, 1789), p. 36.

39 The materials of the Kamchatka Expeditions have recently appeared in a more complete edition: *Russkie ekspeditsii po izucheniyu severnoi chasti Tikhogo okeana v pervoi polovine XVIII v. Sbornik dokumentov* (Moscow, 1984).

40 “Karta Vostochnoi sibirii ot Leny do Kamchatki vklyuchitel’no”: RGVA, f.349, op.45, No. 2422 [no. 60 in A.V. Yefimov (ed.), *Atlas geograficheskikh otkrytii v Sibiri i Severo-Zapadnoi Amerike v XVII-XVIII stoletiyakh* (with the English title *Atlas of Geographical Discoveries in Siberia and North-Western America, XVII-XVIII Centuries*) (Moscow, 1964)]. Size: 45×52 cm. Drawn on paper with ink and water colors.

[Efimov], who discovered and published this map,⁴¹ thought that it had been compiled by Ivan Petrovich Kozyrevskii. Kozyrevskii presented it to Captain Vitus Bering around 1726 as a material contribution to the planning of his voyage from the mouth of the Lena River down to China and Japan. This map is closely connected with works of Remezov (1700), Atlasov (1701), and L'vov (1710). I assume, however, that Kozyrevskii used materials even older than those used



Figure 30. Map of Eastern Siberia from the Lena to Kamchatka Inclusive

by L'vov, Atlasov, and Remezov. By its appearance the map is archaic to the extent that it can be taken as an example of traditional Old Russian maps. Actually, the First Kamchatka Expedition had no alternative but to use maps of this kind. Remezov, Atlasov, L'vov, and Kozyrevskii represented the typical Old Guards serving in the Siberian civilian and military administrations with traditional survey methods which, at least for them, remained unchallenged by the influx of European survey methods. Their main sources were native data and crude surveying - establishing distances mainly in days, and directions of streams by compass, which was done only during river and sea sailings.

As was the case with the Remezov and L'vov maps, Kozyrevskii's map reflects the attention the Russian government paid to the northeast extremity of Siberia. This attention was sharpened on the eve of the eighteenth century due to a mysterious tale of an island or a "Great Land" off the Chukotskii Peninsula. This information was provided by Vladimir Vasil'evich Atlasov, a "captain (*pyatidesyatnik*)" of the Yakut Cossacks, in 1701 after his trip to Kamchatka. In the first decade of the eighteenth century, this tale was repeatedly confirmed by many Cossacks from the Anadyr River region. I.P. Kozyrevskii was one of these Cossack officers with wide travel and military experience in Kamchatka, the Kurile Islands, and the Chukotskii Peninsula. He was involved with the Cossacks who had revolted against V.V. Atlasov and murdered him (on April 1,

41 *Zbornik po istorii Dal'nego Vostoka* (Moscow, 1959).

1711). To avoid the death penalty for this crime, Kozyrevskii, together with Danilo Yakovlevich Antsiferov (who was also connected with this grim affair), asked leave of the higher authorities to atone for their guilt by discovering new lands for Russia. They were permitted to go eastwards, and between 1712-14, reached at least two of the Kurile Islands and obtained descriptions and drawings of approximately fifteen others. In addition, they explored the Kamchatka and Chukotskii Peninsulas, raiding the native population to impose yasak [levy in fur] on them. Thus, in 1726, Kozyrevskii was “well-prepared” to report to Vitus Bering about lands to the south and north of Kamchatka with the presentation of *the Map of Eastern Siberia...* and several crude maps of the Kurile and Japanese Islands.⁴²

According to Kozyrevskii’s report, he compiled these maps of the Kurile Islands and Japan as a result of his voyage with D.Ya. Antsyferov to Shushmu and Paramushir Islands in 1711-13. A Japanese sailor saved from a shipwreck, who was called “Sana,” accompanied Kozyrevskii in 1713 and told him about Japan. On this basis, the Russians compiled *the Drawing of Kamchadal’skii Nos* [“Kamchatka Point”], *up to Matmaiskii* [Hokkaido - A.P.] *and Nifonte* [Japan / ? / - A.P.] *Islands...*⁴³ Some results of these works are reflected in *Ancienne Carte de Siberia et Camchat*, which was discovered in the Bibliothèque Nationale (Paris) (Figure 31).⁴⁴

There is an obvious contrast between the previous, “half-native” maps and the charts and maps produced by the Kamchatka Expeditions, drawn by educated Navy officers and St. Petersburg academicians on the basis of astro-nomic and hydrographic surveys. An example of the latter is a manuscript report by Captain Aleksei Chirikov: *Map Compiled from a Russian Atlas for the West of Tobol’sk, and for the East of It - from Various Descriptions and the Results of the Kamchatka Expeditions... May, 1746.*⁴⁵ At that time (1746), Captain Chirikov served as the superintendent of the Navel Academy in St. Petersburg. After the death of Vitus Bering in 1741, he became the acting chief of the Second Kamchatka Expedition and, therefore, was most qualified for summing up the results of the expeditions. This map reflects the maximum scope of geographic knowledge of the Arctic and Pacific Oceans attained by Russians by 1746, especially through

42 For details see: A.I. Andreev, *Russkie otkrytiya v Tikhom okeane i v Severnoi Amerike v pervoi polovine 18 veka* (Moscow, 1948), p. 13; D.M. Lebedev, *Geografiya Rossii Petrovskogo vremeni* (Moscow-Leningrad, 1950), pp. 49-57.

43 “Chertezh Kamchatskogo Nosa, do Matmaiskogo i Nifonte ostrovov”: RGADA, f.199b, no. 539, kniga 2, list 4.

44 Bibliothèque Nationale (Paris), Département des cartes et plans. Collection de 190 cartes de Russia de J.-N. Delisle. Call No.: Ge. BB. 124 (158).

45 RGVA, f.846, op.16, no. 20227. Scale: 157 versts to 1 inch. Size: 234×85.5 cm. Drawn on paper with ink and water colors. Original by: Aleksei I. Chirikov, “Karta do Tobol’ska s Atlasa Rossiiskogo, a ot Tobol’ska - s raznykh opisaniy i voyajei Kamchatskoi ekspeditsii... Maya, 1746.” This map, unfortunately only its eastern part, was made public by A.V. Yefimov [no. 109 in: Yefimov, *Atlas...*]. In content, it is close to another summary map by A.I. Chirikov: RGVA, f.846, op.16, No. 23466 [no. 110 in: Yefimov, *Atlas...*].

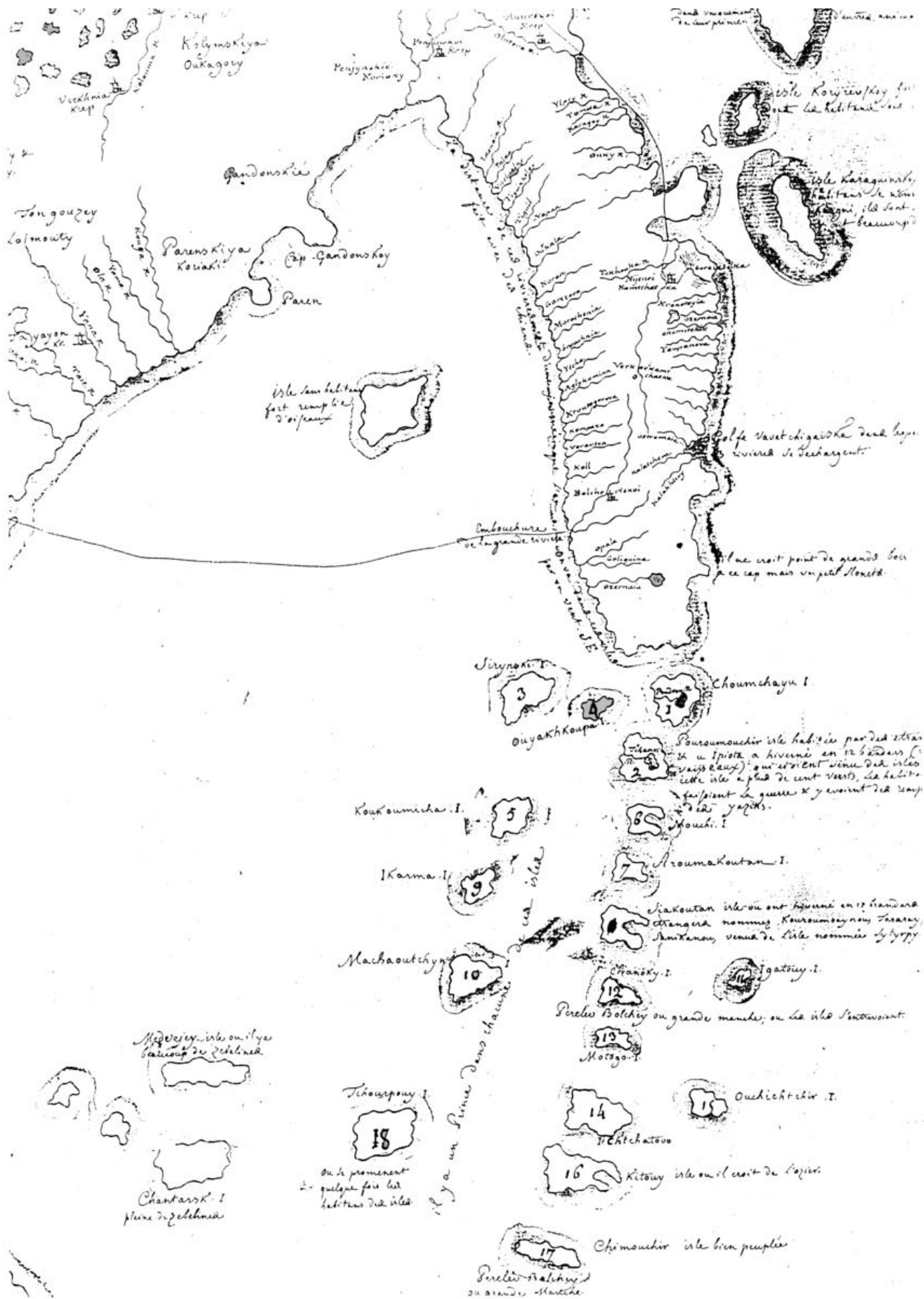


Figure 31. Ancienne Carte de Siberia et Camchat

the two Kamchatka Expeditions. The areas that had not been investigated during the expeditions were left empty on the map.⁴⁶

With regard to the Pacific Ocean, Chirikov's map demonstrates the outstanding results of the voyage he and Bering made on board the "St. Peter" and the "St. Paul" to Alaska's coast. Nautical surveys routinely performed on both expedition vessels served to compile two main charts. These charts, however, convey two different notions about the space between Kamchatka and America. One chart compiled by Ivan Yelagin, the pilot of the "St. Paul," and checked by Aleksei Chirikov, shows several lands between Kamchatka and America, which Chirikov's men correctly took to be islands. The other chart compiled by members of Bering's crew, Sven Vaksel and Sofron Khitrovo, proposes a different picture of the Pacific between Kamchatka and America. Instead of islands, it shows the continuous coast of the American mainland to the middle of the ocean.⁴⁷ In his summary map, Aleksei Chirikov faithfully represented all lands sighted by himself and also by the members of Bering's crew, but he did not copy the wrong interpretation by Vaksel and Khitrovo of their discoveries, and relied upon his own view of the Pacific Ocean between Kamchatka and America which would be proved to be true.

Remarkably, during the Second Kamchatka Expedition, Lieutenant M.R. Shpanberg and Lieutenant V. Valton in the "Archangel Gavriil" and the "St. Mikhail" sailed to the coasts of Japan, landed twice and were well received by the Japanese people.⁴⁸

The discovery made by the Second Kamchatka Expedition that the islands in the Pacific could provide a rich supply of fur, not surprisingly interested Siberian fur traders and hunters, the so-called *promyshlenniki*. Over the next four decades, a number of private companies sent ships and hunting teams to the Pacific. In the course of these voyages the Aleutian Islands and the Alaskan Peninsula were reached and partly explored.⁴⁹ Although these voyages made by the fur traders and hunters in the open sea were very different from their Siberian predecessors' trips along rivers and the Arctic coast in the sixteenth and seventeenth centuries, they made use of the earlier experience, particularly with regard to the exploitation of local geographic knowledge. Moreover, the

46 An explanation of the map gives all the sources used. As one of these sources Chirikov refers to a chart compiled by Fedorov and Gvozdev, the original of which has not been found yet.

47 For more details, see: A.V. Postnikov, *The Mapping of Russian America: A History of Russian-American Contacts in Cartography* (Milwaukee, 1995), pp. 8-10.

48 RGADA, f.199, portfel' 248, tetrad' 8, listy 7-8; A.I. Alekseev, *Syny otvazhnyye Rossii* (Magadan, 1970), pp. 84-85.

49 For interesting details about these voyages, see: O.M. Medushevskaya, "Cartographic Sources of the Russian Geographic Discoveries in the Pacific Ocean in the Second Half of the 18th Century," *The Canadian Cartographer* 9 (1972); S.G. Fedorova, *Russkoe naselenie Alyaski i Kalifornii. Konets 18 veka - 1867 g.* (Moscow, 1971); R.V. Makarova, *Russkie na Tikhom okeane. 1743-99* (Moscow, 1968).